

Appl. No. 09/868,606
Amdt. dated August 13, 2004
Reply to Office Action of April 26, 2004

AMENDMENTS TO THE CLAIMS

Please amend claims 26, 35-36, 38-39, 41, 45, and 47-50 as set forth in the following listing of the claims.

Claims 1-25 (canceled)

26. (currently amended) A multipole electric motor with a rotor and a stator, comprising a plurality of coils, and stator laminations which are magnetically separated from one another and respectively extend from the coils to the rotor, wherein the stator laminations (1, 2, 3, 4) are connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal encircling the rotor, and positioning means, operative with an element extending between the stator and a housing of the motor, for holding the stator in a position within the motor, wherein the element is a foot extending from the holder through an opening in the housing or a pin protruding into an opening in one of the stator laminations.

27. (previously presented) The electric motor as claimed in claim 26, wherein the stator laminations (1, 2, 3, 4) are galvanized.

28. (previously presented) The electric motor as claimed in claim 27, wherein the stator laminations (1, 2, 3, 4) are welded to the holder (11) of the non-magnetic metal.

29. (previously presented) The electric motor as claimed in claim 28, wherein the stator laminations (1, 2, 3, 4) are projection-welded to the holder (11) of the non-magnetic metal.

30. (previously presented) The electric motor as claimed in claim 26, wherein the non-magnetic metal is brass.

31. (previously presented) The electric motor as claimed in 26, wherein the non-magnetic metal is a non-ferrous metal or a non-ferrous metal alloy.

32. (new previously presented) The electric motor as claimed in claim 26, wherein the stator laminations (1, 2, 3, 4) form the stator which centrally has an opening (18) for receiving the rotor (19), individual said stator laminations (1, 2, 3, 4) being arranged around the opening (18).

33. (previously presented) The electric motor as claimed in claim 32, wherein pairs of opposite said stator laminations (1, 2, 3, 4) are bent in relation to one another such that they receive a coil (23, 24).

34. (previously presented) The electric motor as claimed in claim 33, wherein it has four stator laminations (1, 2, 3, 4) and two coils (23, 24).

35. (currently amended) The electric motor as claimed in claim 34, wherein two opposite ones of said stator laminations (1, 2) in a first pair of the laminations are ~~cranked~~ bent once in relation to each other such that parts of the stator laminations (1, 2) are aligned parallel to each other, between which parts a first of said two coils (23) is arranged in a magnetically coupled manner.

36. (currently amended) The electric motor as claimed in claim 35, wherein two other opposite stator laminations (3, 4) in a second pair of the laminations have in a vicinity of the opening (18) a first ~~crank~~ bend and in a vicinity of free ends of the respective laminations a second ~~crank~~ bend, and wherein a second of said two coils (24) is arranged in a magnetically coupled manner between the free ends, of the second pair of laminations.

37. (previously presented) The electric motor as claimed in claim 36, wherein the coils (23, 24) are arranged axially parallel at one height.

38. (currently amended) ~~The electric motor as claimed in claim 26~~ A multipole electric motor with a rotor and a stator, comprising a plurality of coils and stator laminations which are magnetically separated from one another and respectively extend from the coils to the rotor, wherein the stator laminations (1, 2, 3, 4) are connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal, and wherein the holder (11) has at least one foot (13) for mechanically fixing the stator at a its place ~~where the stator is fitted in the motor.~~

39. (currently amended) The electric motor as claimed in claim 38, wherein the foot (13) is ~~crankable~~ bendable after a fitting of the stator for the fixing of the stator at said place.

40. (previously presented) The electric motor as claimed in claim 38, wherein the stator is fixable in a housing.

41. (Currently amended) ~~The electric motor as claimed in claim 26~~ A multipole electric motor with a rotor and a stator, comprising a plurality of coils and stator laminations which are magnetically separated from one another and respectively extend from the coils to the rotor, wherein the stator laminations (1, 2, 3, 4) are connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal, and wherein one stator lamination (1) has an opening (8) into which a positioning pin protrudes.

42. (previously presented) The electric motor as claimed in claim 41, wherein the positioning pin is arranged in a housing.

43. (currently amended) ~~The electric motor as claimed in claim 26~~ A multipole electric motor with a rotor and a stator, comprising a plurality of coils and stator laminations which are magnetically separated from one another and respectively extend from the coils to the rotor, wherein the stator laminations (1, 2, 3, 4) are connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal, and wherein the stator laminations (1, 2, 3, 4) have at their ends facing the coils (23, 24) flattened portions (6) for facilitating fitting of the coils (23, 24).

44. (previously presented) The electric motor as claimed in claim 26, wherein the rotor (19) is connected to a worm drive (22) which drives a spur gear (26).

45. (currently amended) A process for producing an electric motor with a rotor and a stator, comprising a plurality of coils and stator laminations which are magnetically separated from one another and respectively extend from the coils to the rotor, the stator laminations (1, 2, 3, 4) are connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal, the stator laminations (1, 2, 3, 4) being connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal and are connected to one another by at least one web (5), the process comprising the steps of producing the stator laminations as one workpiece (W), ~~wherein aligning and~~ connecting the workpiece (W) ~~is connected~~ to the holder (11) of the non-magnetic metal, and subsequently separating a central portion of the holder and the at least one web (5) between or on the stator laminations (1, 2, 3, 4) ~~being cut through and/or removed completely~~ respectively from the holder and the stator laminations.

46. (previously presented) The process as claimed in claim 45, wherein the connection of the stator laminations (1, 2, 3, 4) to the holder (11) takes place by soldering, adhesive bonding and riveting.

47. (currently amended) The process as claimed in claim 45, wherein the stator laminations (1, 2, 3, 4) are welded to the holder (11) of the non-magnetic metal, ~~the connection takes place by welding.~~

48. (currently amended) ~~The process as claimed in claim 47~~ A process for producing an electric motor with a rotor and a stator, comprising a plurality of coils and stator laminations which are magnetically separated from one another and respectively extend from the coils to the rotor, the stator laminations (1, 2, 3, 4) are connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal, the stator laminations (1, 2, 3, 4) being connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal and are connected to one another by at least one web (5), the process comprising the steps of producing the stator laminations as one workpiece (W), wherein the workpiece (W) is connected to the holder (11) of the non-magnetic metal and the at least one web (5) between or on the stator laminations (1, 2, 3, 4) is cut through or removed completely, wherein the stator laminations (1, 2, 3, 4) are welded to the holder (11) of the non-magnetic metal and are galvanized with a zinc layer, and, wherein the welding is performed as projection welding, boss-shaped projections (12) being formed in the holder (11) and a required welding current being chosen such that atoms of the holder (11) migrate into a the zinc layer of the pole stator laminations (1, 2, 3, 4) without altering the structure of remaining metal of the pole stator laminations.

49. (currently amended) ~~The process as claimed in claim 45,~~ A process for producing an electric motor with a rotor and a stator, comprising a plurality of coils and stator laminations which are magnetically separated from one another and respectively extend from the coils to the rotor, the stator laminations (1, 2, 3, 4) are connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal, the stator laminations (1, 2, 3, 4) being connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal and are connected to one another by at least one web (5), the process comprising the steps of producing the stator laminations as one workpiece (W), wherein the workpiece (W) is connected to the holder (11) of the non-magnetic metal and the at least one web (5) between or on the stator laminations (1, 2, 3, 4) is cut through or removed completely, and wherein the one or more webs (5) between stator surfaces are cut through by punching and/or removed completely.

50. (currently amended) ~~The process as claimed in claim 45,~~ A process for producing an electric motor with a rotor and a stator, comprising a plurality of coils and stator laminations which are magnetically separated from one another and respectively extend from the coils to the rotor, the stator laminations (1, 2, 3, 4) are connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal, the stator laminations (1, 2, 3, 4) being connected in a region facing the rotor (19) to a holder (11) of non-magnetic metal and are

connected to one another by at least one web (5), the process comprising the steps of producing the stator laminations as one workpiece (W), wherein the workpiece (W) is connected to the holder (11) of the non-magnetic metal and the at least one web (5) between or on the stator laminations (1, 2, 3, 4) is cut through or removed completely, and wherein the workpiece (W) and the holder (11) are positioned with one another by a pin passed through centering openings (10, 17).